

## TU'I MALILA, "COOK'S TORTOISE"

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*Abstract.* Tu'i Malila, the tortoise long kept at the Royal Palace of Tonga, and associated by tradition with Captain James Cook, died in 1966. It has been identified as *Testudo radiata* Shaw, 1802, a Madagascan species, and its possible history is discussed.

In May, 1966, the tortoise long kept and guarded in the grounds of the Royal palace of Nuku'alofa died and was sent to the Museum to be preserved and mounted at the request of the Government of Tonga. According to tradition it was Captain James Cook's gift during his stay in Tonga on the third voyage (in May-July, 1777), and has been described variously in literature as a "giant" tortoise, and presumably by inference since it was thought to be of "giant" size as having originated from one of the Indian Ocean islands inhabited — or formerly inhabited — by large-sized tortoises, or from the Galapagos group, inhabited by a further equally large species.

When received at the Museum the body of Tu'i Malila was partly thawed after transport in deep freeze. The specimen as preserved and mounted by the Preparator, Mr L. J. Cappel is shown in Figs. 1 and 2. Tu'i Malila proved on examination by one of us (J.R.) to be a Madagascan radiated tortoise *Testudo radiata* Shaw, 1802; this species, restricted to Madagascar, is one of a medium-sized group within the genus characterised both by size and by the strongly-arched carapace. Members of the group occur in South Africa, India and Ceylon, as well as on Madagascar. *T. radiata* has well-marked brownish-yellow lines radiating from the centre of each of the shields of the carapace.

The length of Tu'i Malila (carapace: in a straight line) was 41.27 cm (16¼ in.), width 33.00 cm (13 in.), height 24.13 cm (9½ in.). Unfortunately, sex was indeterminable from the reproductive organs, as most soft tissues had almost completely disintegrated, evidently on account of freezing and thawing since death. However, Oliver (1953) states: "In most tortoises the sex of adult individuals is easily ascertained by examination of the . . . plastron. In male animals the plastron is strongly concave, whereas in females it is flat or slightly convex." A photograph illustrating Oliver's paper shows the markedly concave plastron of a male *Testudo denticulata*. On this basis Tu'i Malila appears to have been a female, though the animal was traditionally believed to be a male (see below). The conformation of the carapace and arrangement of shields is shown in Figs. 3-6.

The characteristic radiate colour pattern is hardly evident, no doubt on account of the animal's extreme old age. The carapace shows sundry dents and scars (see Cameron, 1964, who says: "He is quite blind and carries a much scarred shell, one dent was given him by a kicking horse, another by the wheels of a dray. As he is blind, he had once strayed unseeing into a grass fire in the royal gardens and split his carapace up one side"). These dents and scars are well shown in the accompanying photographs of the mounted specimen.

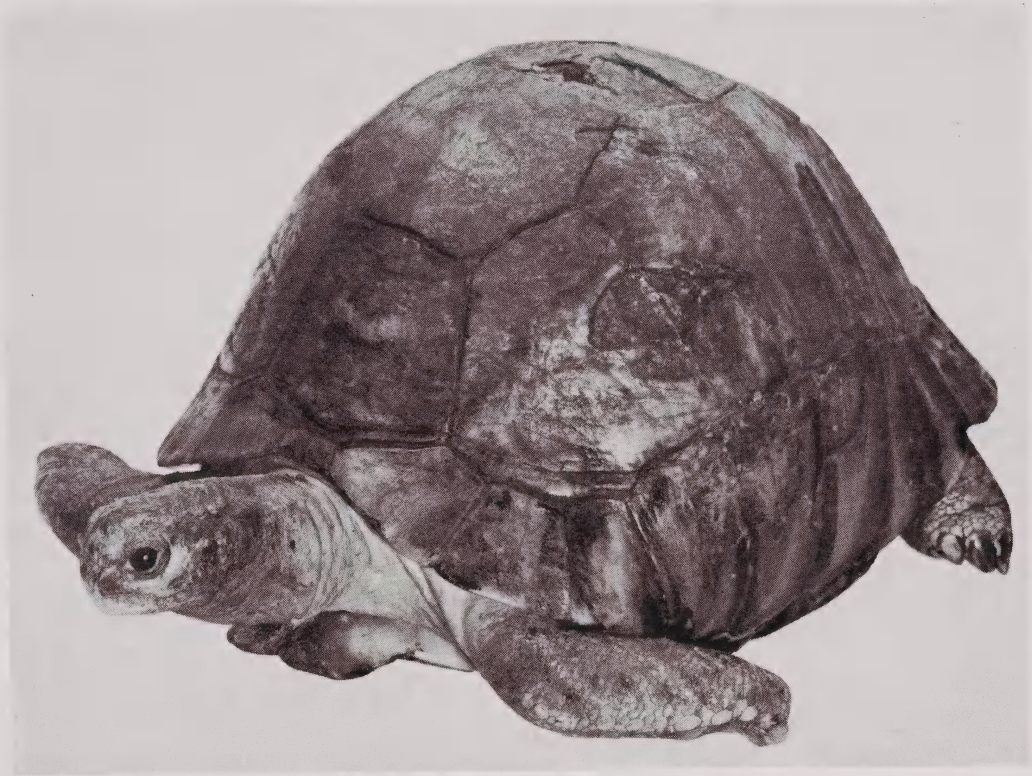


Fig. 1. Tu'i Malila. Front view. (Vahry photo.)

It might be noted in passing that the "giant" tortoises of the Indian Ocean islands (Aldabras, Mascarene Islands, Seychelles), and of the Galapagos, are of very much larger size than tortoises of the medium-sized group including *Testudo radiata*, the shell in large individuals of the "giant" species reaching a length of 121.92 cm (48 in.), or a little more.

The substance of the traditional account of the often-quoted association of Tu'i Malila with Cook is given by Beaglehole (1967 : pp.civ.cv, footnote) : "An ancient and battered animal, he certainly went attended by a Cook tradition. Cook, it is alleged, gave a pair of tortoises to Sioeli Pangia, a chief of Lifuka. When the Tu'i Tonga subsequently visited the Ha'apai group the chief gave them to him as playthings for his daughter at Mu'a. There the female tortoise died a little later; and after the death of the last Tu'i Tonga the male was looked after by the Catholic fathers and sisters at Mu'a. He was given the Tongan name of Tu'i Malila from the place where he lived. He was brought to Nuku'alofa in 1920". Beaglehole (*ibid.*) goes on to say that in the absence of any written record the tradition connecting the tortoise with Cook must be accepted with reservation, and we are grateful to Dr J. C. Beaglehole for answering in some detail our enquiries on this point and for permission to quote his reply. Dr Beaglehole has confirmed (*in litt.*) that there is no mention anywhere to his knowledge in any of the records of the Third Voyage of the traditionally recorded gift of the tortoises, and adds "... it is most unlikely that Cook would have presented any such animal to a Tongan without mentioning the fact in his Journal".



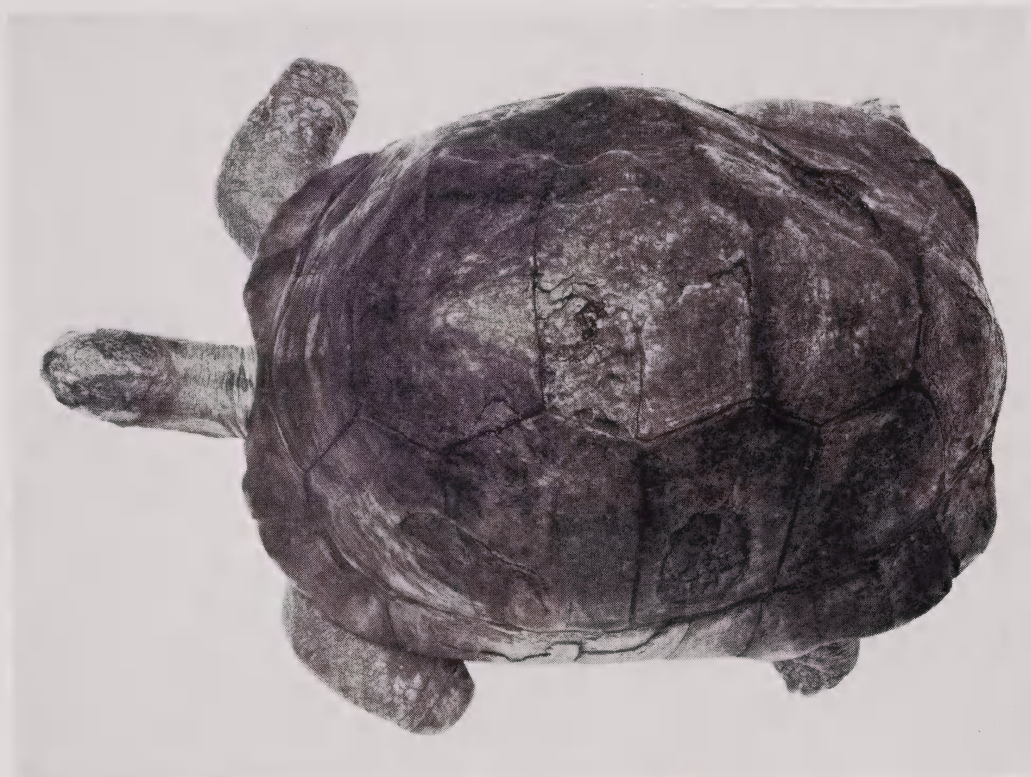
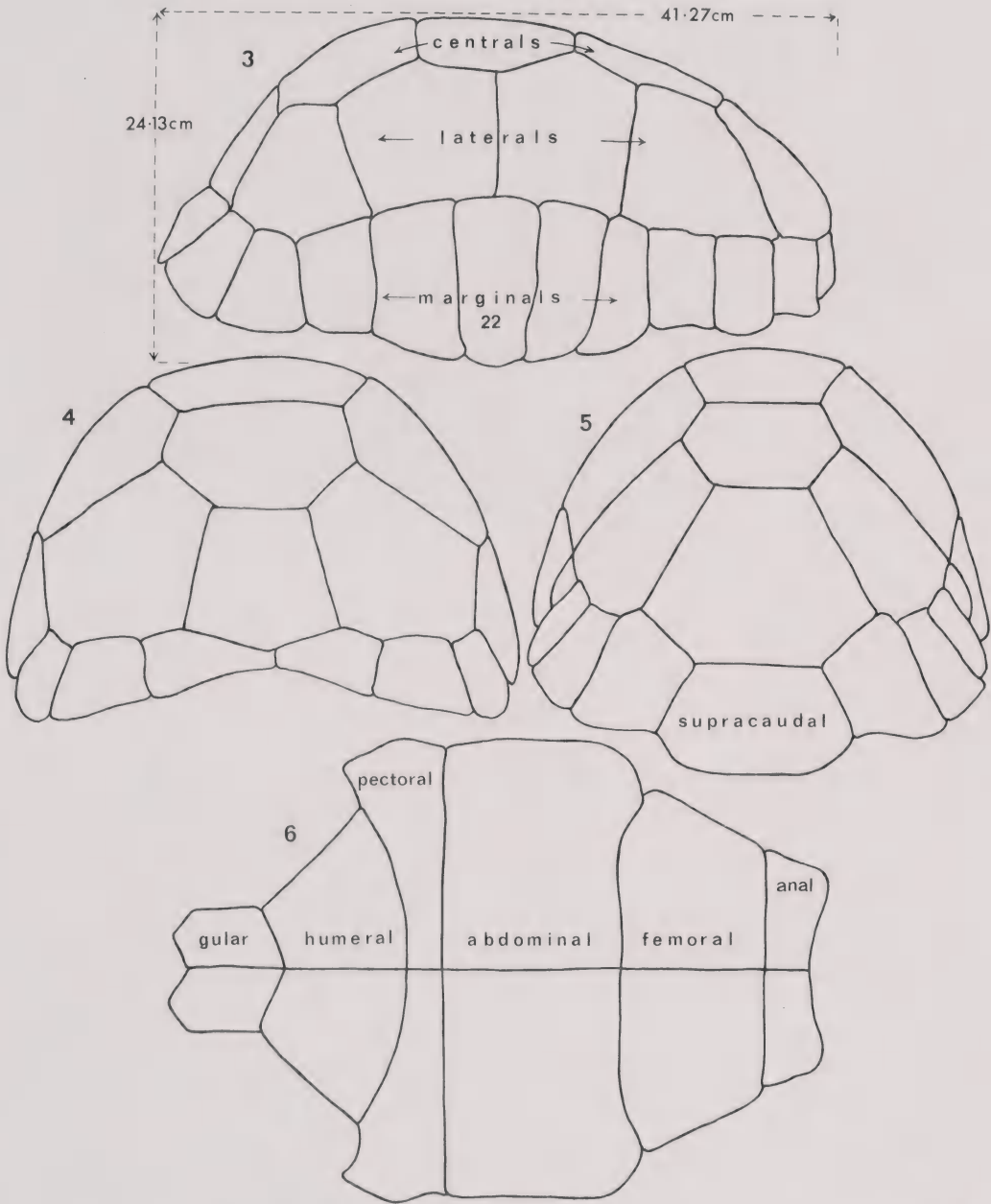


Fig. 2. Tu'i Malila. From above. (Vahry photo.)

Dr Beaglehole has suggested, however, in his letter to us that such a gift could perhaps have come from a member of the ship's company; he says: "Some midshipman could easily have brought one or two on board the ship, as monkeys were brought, for pets, on the second voyage at the Cape Verdes. And just as Cook got fed up with the mess the monkeys caused and had them thrown overboard, he may have got fed up with the tortoises". Or the transaction may have been — again a suggestion from Dr Beaglehole — one of simple trading by the ship's company. In either case tortoises could have been picked up during Cook's stay at Cape Town, and transferred thence to Tonga.

In summary, the association with Cook appears to be a matter of doubt, and must thus remain unless further material on the Voyages is brought to light.

Tortoises — including the "giant" species — were, as described in numerous accounts, frequently carried as food by seafarers of the sixteenth to nineteenth centuries, and as a result several Indian Ocean forms became extinct; whaling gave rise to increased depredations, especially upon the Galapagos species, the stocks on some islands reaching very low ebb. As Loveridge (1946) aptly writes, with reference to the Galapagos: "In those pre-refrigeration days it did not take the whalers long to discover a welcome source of fresh meat in reptiles that could subsist for a long time without food".



Figs. 3-6. *Testudo radiata* Shaw, Nuku'alofa. Carapace and plastron. 3. Lateral. 4. Anterior. 5. Posterior. 6. Ventral (plastron).

Even though possibly not actually associated with Cook's Third Voyage, Tu'i Malila, in view of Tongan tradition, had been in Tonga for a long time, a possible alternative period of arrival being the whaling and trading era of the early nineteenth century.

This still leaves us with a probable age impressive enough, even for a tortoise; authentic records include 100 years in the case of one of the Galapagos giant tortoises, while a Mauritian giant tortoise is known to have survived for 152 years. Referring to longevity in medium and small species Carr (1952) says: "Smaller turtles may require as much time to reach maturity as the most ponderous ones, and their expected life span is not by any means proportionately shorter . . . Nichols estimated that at least 20 years may be required for a New York box turtle to complete its growth, and that the life expectancy is about 40 or 50 years, with good evidence that individuals may attain ages of between 80 and 123 years"; Schmidt and Inger (1957) comment that "the small European tortoises share the capacity for living to a great age for which the giant island forms are especially famous".

The mounted tortoise, returned to the Tongan Government after a period of exhibition in the Museum, is now on show in the International Dateline Hotel at Nuku'alofa.

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